

Legend of Mating Node Graph¹

in Morgan Horse Flaxen Color Research Project

Symbol	Meaning
Rectangle	Male (stallion)
Circle	Female (mare)
Black dot	Mating node, representing a sire X dam couple.
Rectangle with cut-off lower corners (inverted house symbol)	Gelding
Diamond	Gender of the horse is unknown or invalidly encoded in the data set.
Arrows	Genetic relationship of horses. Arrows from sire and dam converge at a black dot called the mating node, from which arrows go to the symbols of the offspring (if any) of that pair.
Rows in the chart	Symbols are organized automatically into rows so that horses which are ancestors of a particular horse are higher on the page than the horse is. This tends to put the foundation horses (for which there is no ancestor in the pedigree data) at the top and the youngest horses near the bottom, although the rows are not strictly by age but rather by generational ranking. Mating nodes are on rows between the horse symbol rows.
Horizontal position	Symbols are automatically arranged horizontally to minimize the number of line-crossings. The horizontal position has no significance.
Grey filled symbol	Flaxen trait unknown.
Yellow filled symbol	Horse shows any degree of flaxen trait in either mane or tail or both.
Orange filled symbol	Horse does not show any degree of flaxen trait.
Thick blue border	Photograph of the horse is available by clicking on the “eye” symbol in the horse's individual pedigree.
Label inside the symbol	Each horse is labeled on the graph with a unique identifier constructed as follows: If the horse is among the sires in the study, the identifier begins with the letter “s” followed with a sequentially assigned sire number. Similarly, the dams are identified by “d” and a dam number, unbred horses are identified by “u” and their unique number. (Mating nodes have a hidden identifier “c” followed by a unique number.) These numbers may change if additional horses are added to the data, but on one graph each particular horse will always have a unique identifier.
Pop up box and text message	Hovering the mouse pointer over a symbol will cause a small box to appear, which displays that symbol's unique identifier in the graph. Simultaneously, the URL of the horse's individual pedigree (or the couple's progeny graph for a mating node) will appear in the message line at the bottom of the browser. The registered name of the horse can be read within the URL. The URL of a mating node shows sire_X_dam names.
Mouse-click on symbol	With the mouse pointer hovering on a symbol, clicking the mouse's left button will open the URL in the browser. See the explanation of the pedigrees in a separate document accompanying this one.

¹ The graphs are in two sizes (small and large), two formats (svg and pdf), and two layouts (horizontal rows and circular).